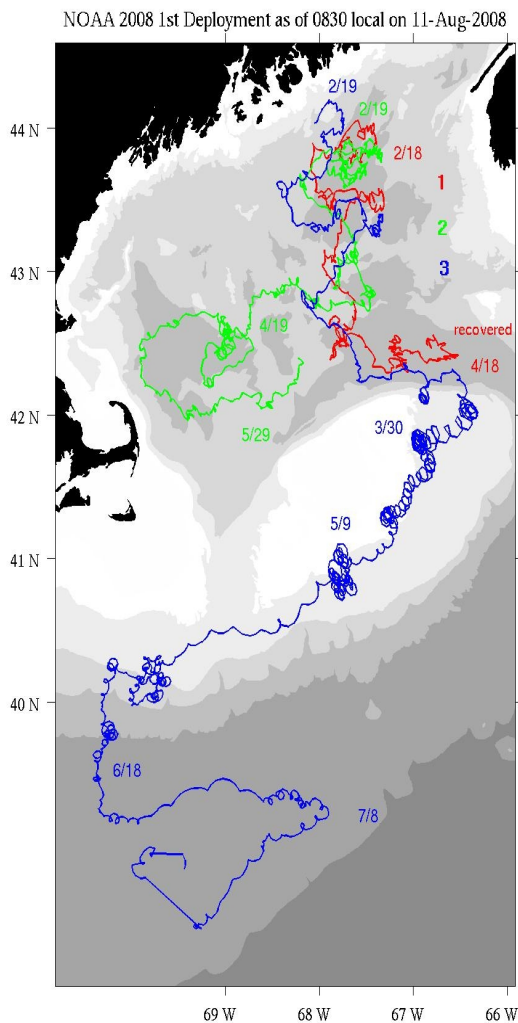


Drifter Results

A total of 8 satellite-tracked surface drifters were deployed. Two units failed before they were even released. Since this pair was stored within the lab (away from sky view) for a few weeks prior to coming on deck, there is some chance they automatically shut down prior to deployment but the exact cause of the malfunction is still a mystery. The other six units traveled a total of 26,369 kilometers after three were deployed on 18-19 February (Fig J1) and three on 5 March (Fig J2). Each triplet was deployed along a transect perpendicular to the shore in an attempt to document the Jordan Basin Gyre. All six units took a somewhat-anomalous “short-circuit” route towards Georges Bank. While this pathway is probably not the dominant mode for the surface waters on Jordan Basin, it has been observed several times before. One of these six units was recovered by a Nova Scotian Fishermen on 18 April and one stopped transmitting on 5 June. The remaining four units made it beyond Georges Bank and were advected by the Gulf Stream to some degree. One unit transmitted well beyond the Grand Banks, nearly half way to Europe (~42 W) before it eventually died in late August.



While details of each drifter's journey is documented at <http://www.nefsc.noaa.gov/drifter> (along with access to the data of these and 47 others deployed around the Gulf of Maine in 2008), one unit (#82376) is depicted in Fig. J3 below. This unit was retained on the Northeast Peak of Georges Bank for well over a month before it entrained in the shelf-slope front jet towards the Great South Channel. At the time of this writing, it is evidently entrained in Gulf Stream meanders but now approaching the end of its battery life after logging a total of 7171 kilometers. The velocity record for this example drifter is presented in Fig J4.

Figure J1. February deployment tracks emanating from Jordan Basin.

NOAA 2008 2nd Deployment as of 0921 local on 29-Sep-2008

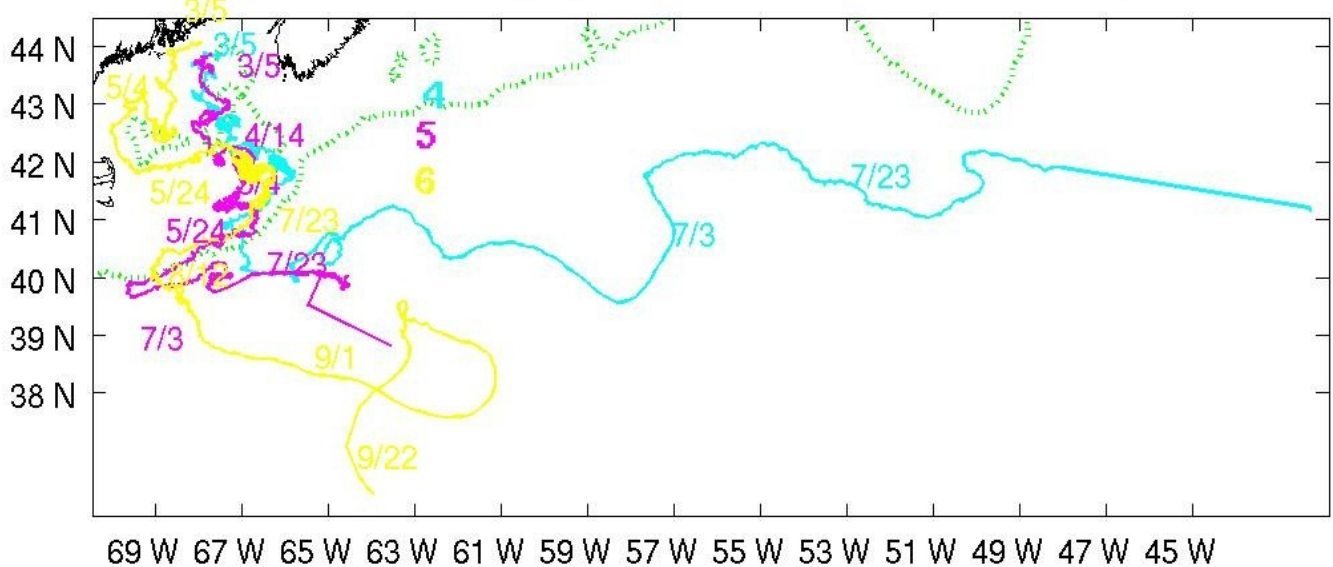


Figure 2. March deployment drifter tracks emanating from Jordan Basin. The 200m isobath is shown with a green dashed line. All three of these units made it to deep Gulf Stream waters.

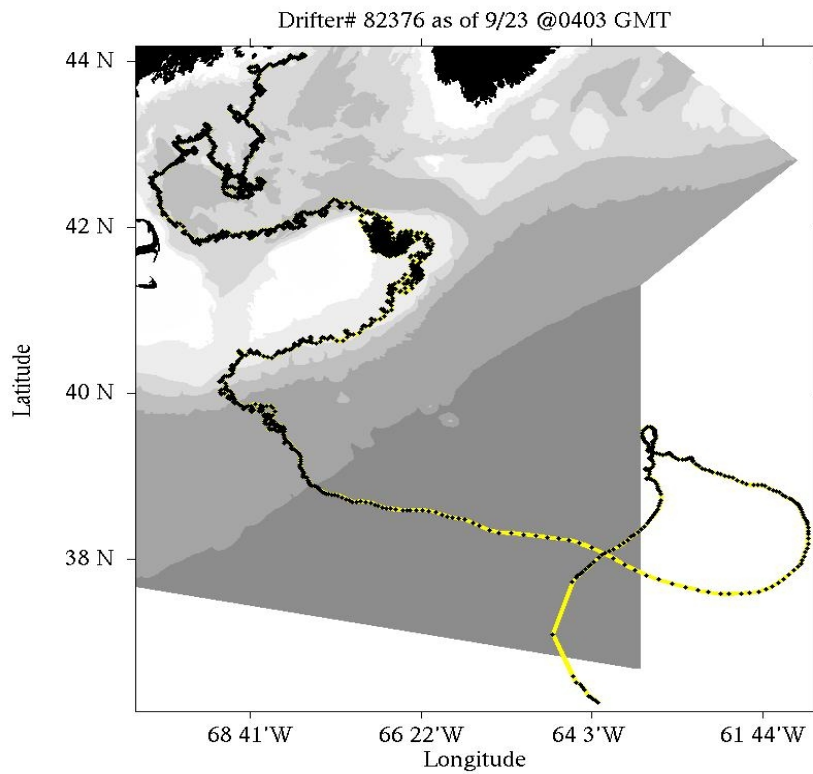


Figure 3. Track of #82376

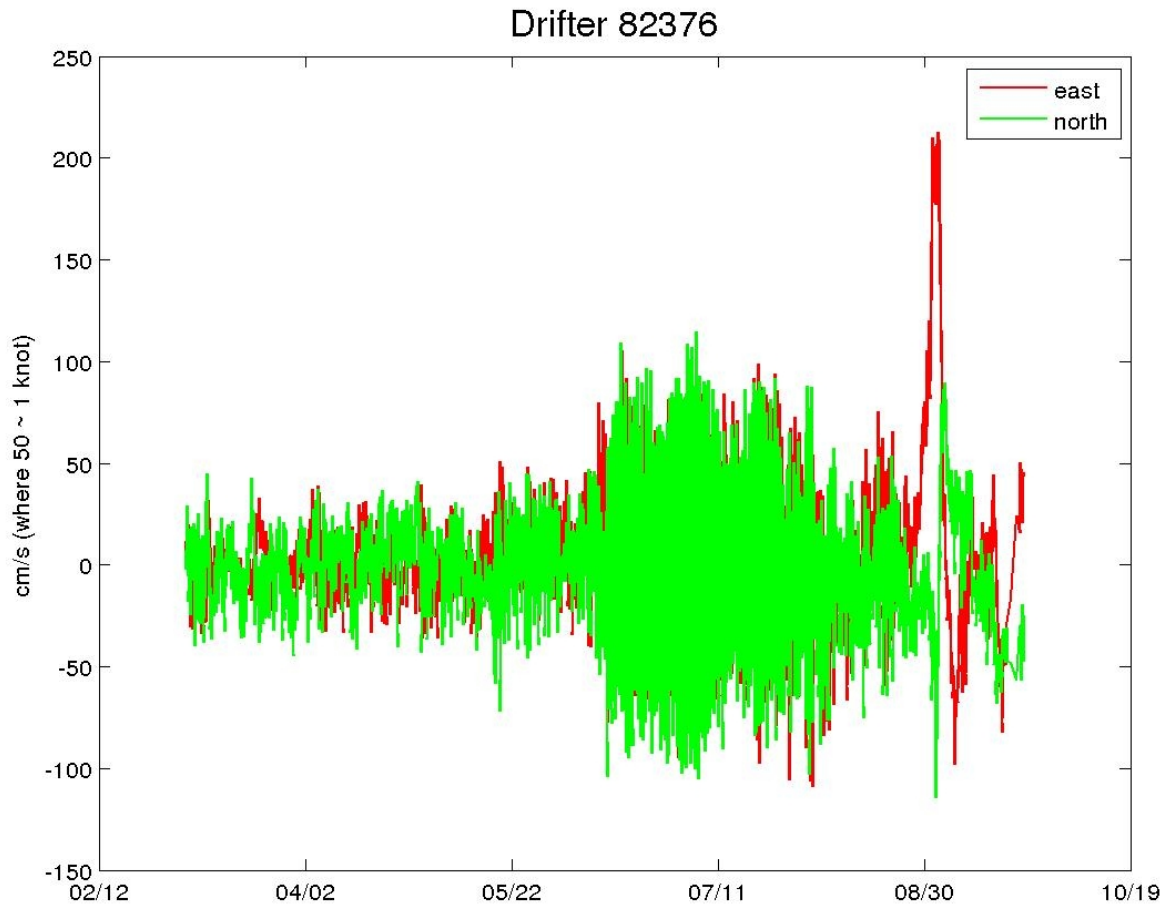


Figure J4. Velocity time series of drifter 82376 showing Georges Bank tides (~ 100 cm/s) in July and Gulf Stream advections (~ 200 cm/s) in August.